

4. (Withdrawn) An apparatus according to claim 1, further comprising a spacer for providing a gap between the solid polymer electrolyte membrane and the anode.

5. (Withdrawn) An apparatus according to claim 4, the spacer being formed of teflon.

REMARKS

This Amendment is submitted in response to the Official Action dated January 8, 2008, the deadline for response being herewith extended by two (2) months to June 8, 2008.

Reconsideration and allowance of claim 1 is respectfully requested. Claims 1 is herein amended.

Claims 2-5 are withdrawn.

The Examiner rejects claims 1 as being anticipated by U.S. Patent 5,256,268 to Goto, et al. ("Goto"). Goto is in some ways similar to the present invention but with structure assembled substantially differently such that the disclosure of Goto is incapable of the utility provided by the present invention. More specifically, the Examiner asserts that the Goto discloses a water treatment apparatus wherein ozone is provided, the apparatus comprising: an anode; a cathode; a solid polymer electrolyte membrane; an auxiliary electrode, located between the membrane and the cathode composed of metallic material coated with platinum oxide, whereby the auxiliary [electrode] is provided to prevent dissolution of the dielectric material/cathode when comprised of carbon, graphite or carbon fiber. Importantly, the Examiner is incorrect regarding the placement of the auxiliary electrodes and membranes in the two inventions. It can be seen from Figure 10 of Goto, as cited by the Examiner, that porous diaphragm/spacer 206 and fixed floor of carbon material 205 are located between the cathode 203 and the auxiliary electrode 207 so that "all oxygen gas is generated from the auxiliary electrode 207, so that the fixed floor 205 is not contacted with oxygen gas and dissolution of the fixed floor 205 can be effectively inhibited." Col. 22 lines 12-15. Conversely, the auxiliary electrode in the present invention is placed

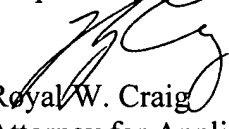
between the cathode and the electrolytic membrane, in contact with the cathode, to inhibit generation of scale on the cathode. The auxiliary electrode in Goto serves to generate oxygen to inhibit dissolution of the carbon fixed floor, whereas the auxiliary electrode in the present invention contacts the cathode and prevents any generation of oxygen. Additionally, placing the auxiliary electrode directly adjacent to the cathode in the present invention serves to attract hydrogen ions generated by the anode toward the cathode, thereby alleviating the electrolytic resistance between the anode and the cathode.

Claim 1 is herein amended to distinguish Goto by limiting the device ("consisting of") an anode, cathode, solid polymer electrolyte membrane disposed between the anode and the cathode, and an auxiliary electrode disposed between the cathode and the solid polymer electrolyte membrane, and by requiring the auxiliary electrode to be "in the form of a net having 10~100 meshes and a thickness of 0.1~2.0 mm." Consequently, claim one should be patentably distinguished.

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In view of the above amendments and remarks, it is believed that this application is now in the proper condition, and a Notice of Allowance is respectfully requested.

Respectfully submitted,


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